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**MPE REPORT**

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<b>Manufacturer:</b>	<b>Bargetender, LLC 301 Rylane Jackson, Missouri 63755 USA</b>
<b>Applicant:</b>	<b>Same As Above</b>
<b>Product Name:</b>	<b>Bargetender BT-ADS (1.x)</b>
<b>Product Description:</b>	The BT-ADS is comprised of two or more sensors plus a gateway device to collect/aggregate sensor data and relay to a BLE-capable device. The system reports real-time freeboard/draft.
<b>Model(s):</b>	<b>BT-ADS</b>
<b>FCC ID:</b>	<b>2A26D-159184</b>
<b>Testing Commenced:</b>	2021-08-19
<b>Testing Ended:</b>	2022-02-09
<b>Test Results:</b>	<b>In Compliance</b>
	The EUT complies with the EMC requirements when manufactured identically as the unit tested in this report, including any required modifications. Any changes to the design or build of this unit subsequent to this testing may deem it non-compliant.
<b>Standards:</b>	
	<ul style="list-style-type: none"><li>• <b>KDB447498</b></li></ul>



Order Number: F2P26088

Client: Bargetender, LLC  
Mode(s): BT-ADS

**Evaluation Conducted by:**

Julius Chiller, EMC/Wireless Engineer

**Report Reviewed by:**

Ken Littell, Vice President of EMC

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## 1 ADMINISTRATIVE INFORMATION

### 1.1 Measurement Location:

F2 Labs in Middlefield, Ohio. Site description and attenuation data are on file with the FCC's Sampling and Measurement Branch at the FCC Laboratory in Columbia, MD.

### 1.2 Measurement Procedure:

All measurements were performed according to KDB558074.

### 1.4 Document History

Document Number	Description	Issue Date	Approved By
F2P26088-02E	First Issue	2022-02-09	K. Littell



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## 2 SUMMARY OF TEST RESULTS

Test Name	Standard(s)	Results
RF Exposure for Device >20cm from Human	KDB447498	Complies

Modifications Made to the Equipment
None



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### **3      ENGINEERING STATEMENT**

This report has been prepared on behalf of Bargetender, LLC to provide documentation for the testing described herein. This equipment has been tested and found to comply with KDB447498. The test results found in this test report relate only to the item(s) tested.



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## 4 EUT INFORMATION AND DATA

### 4.1 Equipment Under Test:

Product: Multi-Input Freeboard Device  
Model: **BT-ADS**

Serial No.: None Specified  
FCC ID: **2A26D-159184**

### 4.2 Trade Name:

Bargetender, LLC

### 4.3 Power Supply:

**USB Charger; 4.2V Lithium Battery**

### 4.4 Applicable Rules:

- KDB447498

### 4.5 Equipment Category:

Radio Transmitter-DTS

### 4.6 Antenna:

900 MHz, 1dBi; 2.4 GHz, 4dBi

### 4.7 Accessories:

N/A

### 4.8 Test Item Condition:

The equipment to be tested was received in good condition.



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## 5 RF Exposure for Device >20cm from Human

**FCC Requirements:** **Distance used is 20cm**

**Limit:** 300-1500 MHz =  $f/1500$   
1,500-100,000 MHz =  $1.0 \text{mW/cm}^2$

**Formula used for result:** Results taken from the test report F2P26088-01E.

$$\frac{\text{E.I.R.P.}}{4 \pi R^2}$$

**Results:** E.I.R.P. = 2.79mW For Bluetooth  
E.I.R.P = 19.95 mW for 900 MHz band

$$\frac{2.79 \text{mW}}{4 \pi R^2} = \frac{2.79 \text{mW}}{5026.55} = 0.006 \text{ mW/cm}^2$$

$$\frac{19.95 \text{mW}}{4 \pi R^2} = \frac{19.95 \text{mW}}{5026.55} = 0.004 \text{ mW/cm}^2$$

MPE for 900 MHz band is 0.004 mW/cm<sup>2</sup>  
Limit = 0.60 mW/cm<sup>2</sup>  
Ratio = 0.007

MPE for 2.4 GHz Bluetooth is 0.006 mW/cm<sup>2</sup>  
Limit = 1 mW/cm<sup>2</sup>  
Ratio = 0.006

Combined Ratio = **0.013**

**Combined Ratio Limit = 1**